

Notice of Allowability

Application No.

10/718,408

Applicant(s)

SASA, NOBUMASA

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed 5/1/06 & amendment and 1.132 declaration filed 6/21/06.
2. ☒ The allowed claim(s) is/are 1,3-8 and 10-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Statement of Reasons for Allowance

1. Prior to setting forth the reasons for allowance, it is noted that a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/1/06 has been entered.

The present claims are allowable over the "closest" prior art Roth (U.S. 5,889,084), Watanabe et al. (U.S. 6,783,840), and Maeda et al. (U.S. 6,805,439) for the following reasons:

Roth discloses actinic radiation curable ink comprising colorant, photopolymerizable monomers and oligomers selected from epoxy monomers and oligomers and/or vinyl ether monomers and oligomers, and cationic photoinitiator wherein the ink possesses viscosity of 1-500 cP.

However, while Roth discloses list of photopolymerizable monomers and oligomers that includes epoxy monomers and oligomers such as oxetane and epoxidized soybean oil, there is no requirement in Roth to utilize epoxy monomers and oligomers. Further, even if epoxy monomers and oligomers are utilized as the photopolymerizable monomers and oligomer in Roth, there is no disclosure to utilize a combination of such epoxy monomers and oligomers. Additionally, even if a combination of epoxy monomers and oligomers is utilized in Roth, there is no disclosure or suggestion in Roth to utilize the specific combination of oxetane and epoxidized

soybean oil as required in all the present claims and no motivation to select out such combination from the long list of epoxy monomers and oligomers disclosed by Roth.

Watanabe et al. disclose curable ink comprising oxetane compound and epoxidized soybean oil or butyl or octyl epoxy stearate. However, there is no disclosure or suggestion in Watanabe et al. of the viscosity of the ink as required in all the present claims. Further, while Watanabe et al. disclose the use of compound having at least one epoxy group including epoxidized fatty acid ester, i.e. butyl or octyl epoxy stearate, or epoxidized fatty acid glyceride, i.e. epoxidized soybean oil, note that a person of ordinary skill could not have attained the particular compound in the present claims, i.e. epoxidized fatty acid ester or epoxidized fatty acid glyceride, without either impermissible hindsight knowledge acquired directly from the instant application or by making a fortuitous selection of the claimed compound from amongst a large number of compounds disclosed by the reference, especially since there is no disclosure or suggestion to select out the epoxidized fatty acid ester or epoxidized fatty acid glyceride as more favorable than the other compounds. The latter would, of course, run contrary to the ruling of the Federal Circuit in *In re Baird* 29 USPQ2d 1550, and is thus unacceptable.

Maeda et al. disclose curable ink possessing viscosity of 2-30 cP wherein the ink comprises oxetane, however, there is no disclosure or suggestion of epoxidized fatty acid ester or epoxidized fatty acid glyceride as required in all the present claims.

The above is especially significant in light of the 1.132 declaration filed 6/21/06 and the 1.132 declaration filed 4/13/06.

In addition to applicant's comments concerning the declarations as set forth on pages 8-9 of the amendment filed 6/21/06, it is further noted that the declarations compare inks within the

scope of the present claims, i.e. comprising oxetane compound and epoxidized soybean oil (examples 23(1)-23(5)), with inks outside the scope of the present claims but within the scope of Roth, i.e. comprising no oxetane (ink 21 or ink 22), comprising no oxetane or epoxidized soybean oil (ink 2), or comprising no epoxidized soybean oil (ink 24). It is shown that the ink of the present invention is superior in terms of storage stability and safety. Thus, the 1.132 declarations filed on 6/21/06 and 4/13/16 are successful in establishing unexpected or surprising results over the cited prior art.

Thus, it is clear that Roth, Watanabe et al., and Maeda et al., either alone or in combination, do not disclose the present invention.

In light of the above, it is clear that the rejections of record are untenable and so, the present claims are passed to issue.

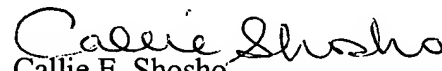
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
8/28/06